

**TABLE M.5.6.1.2–3.—National Ignition Facility Accident Frequency and Consequences (Median Meteorology)**

Accident	MEI			Offsite Population <sup>a</sup>		Individual Noninvolved Worker		Noninvolved Worker Population	
	Frequency (per year)	Dose (rem)	LCFs <sup>b</sup>	Dose (person-rem)	LCFs <sup>c</sup>	Dose (rem)	LCFs <sup>b</sup>	Dose (person-rem)	LCFs <sup>c</sup>
Earthquake during No Action Alternative operations	$2.0 \times 10^{-8}$	$4.78 \times 10^{-4}$	$2.87 \times 10^{-7}$	$1.96 \times 10^{-1}$	$1.18 \times 10^{-4}$	$1.43 \times 10^{-3}$	$8.60 \times 10^{-7}$	$2.08 \times 10^{-1}$	$1.25 \times 10^{-4}$
Earthquake during depleted uranium shot	$2.0 \times 10^{-9}$	$9.68 \times 10^{-4}$	$5.81 \times 10^{-7}$	$2.40 \times 10^{-1}$	$1.44 \times 10^{-4}$	$2.55 \times 10^{-3}$	$1.53 \times 10^{-6}$	$3.48 \times 10^{-1}$	$2.09 \times 10^{-4}$
Earthquake during highly enriched uranium shot	$2.0 \times 10^{-9}$	$1.02 \times 10^{-3}$	$6.09 \times 10^{-7}$	$2.47 \times 10^{-1}$	$1.48 \times 10^{-4}$	$2.64 \times 10^{-3}$	$1.59 \times 10^{-6}$	$3.59 \times 10^{-1}$	$2.16 \times 10^{-4}$
Earthquake during thorium shot	$2.0 \times 10^{-9}$	$1.04 \times 10^{-3}$	$6.24 \times 10^{-7}$	$2.43 \times 10^{-1}$	$1.46 \times 10^{-4}$	$2.65 \times 10^{-3}$	$1.59 \times 10^{-6}$	$3.57 \times 10^{-1}$	$2.14 \times 10^{-4}$
Earthquake during tracer shot	$2.0 \times 10^{-9}$	$5.44 \times 10^{-4}$	$3.26 \times 10^{-7}$	$2.09 \times 10^{-1}$	$1.26 \times 10^{-4}$	$1.63 \times 10^{-3}$	$9.80 \times 10^{-7}$	$2.29 \times 10^{-1}$	$1.38 \times 10^{-4}$
Earthquake during plutonium without yield shot	$2.0 \times 10^{-9}$	$1.65 \times 10^{-3}$	$9.89 \times 10^{-7}$	$5.46 \times 10^{-1}$	$3.28 \times 10^{-4}$	$4.99 \times 10^{-3}$	$3.00 \times 10^{-6}$	$7.41 \times 10^{-1}$	$4.45 \times 10^{-4}$
Earthquake during plutonium with yield shot	$2.0 \times 10^{-9}$	$9.01 \times 10^{-4}$	$5.41 \times 10^{-7}$	$3.16 \times 10^{-1}$	$1.90 \times 10^{-4}$	$2.69 \times 10^{-3}$	$1.62 \times 10^{-6}$	$3.96 \times 10^{-1}$	$2.38 \times 10^{-4}$

Source: LLNL 2003d.

<sup>a</sup>Based on the population of approximately 6,900,000 persons residing within 50 miles of LLNL.<sup>b</sup>Increased likelihood of a latent cancer fatality.<sup>c</sup>Increased number of latent cancer fatalities.

LCFs = latent cancer fatalities; MEI = maximally exposed individual.